

ORGBP rolls up sleeves for drive October 30, 31



AN ARM UP FOR MANKIND—Steve Kaye, director of ORNL's Health and Safety Research Division, lifts his arm in salute to his fellow man in the recent Red Cross blood drive. Donating blood means that injured people, the sick, or those requiring surgery, will have it on hand when they need it.

This time it's ORGBP rolling up its sleeves! Following the successful blood drive by the Red Cross in early August at ORNL, plans are now set for the drive at ORGBP. It will be held from 9 a.m. until 3 p.m. Monday and Tuesday, October 30, 31. A trailer will be alongside the conference room at Portal 2 (the main entrance) for registration and history-taking, and actual drawing will be held in the conference room. The small anteroom will be used as a refreshment canteen.

Donors are asked to volunteer through their divisional representatives, so that an even flow of volunteers will be processed.

(The need for fresh blood is emphasized in Dr. Lincoln's column in this issue, on page four.)

A blood drive at the plant will assure all employees and their families of blood needs in any area... no matter which hospital uses the blood.

Lonnie L. Anthony, Computer Sciences Division; and G. Charlie Baker, president of the Oil Chemical and Atomic Workers International Union Local 3-288, are co-chairing the drive at ORGBP.

Anthony and Baker wholeheartedly endorsed the drive at ORGBP and issued the list of divisional chairmen.

Donors will be scheduled at regularly spaced intervals so that an even movement of activities will be ensured. Time required for the entire process is estimated at one hour.

When an employee has need of blood for himself or any member of his family, he should contact the American Red Cross, Oak Ridge Chapter, telephone 483-5641, and give them the name of the patient and the hospital where the blood is, or was, needed. It is best to do this in advance when elective surgery is planned, officials at the Red Cross state.

Division blood donor contacts:

Computer Sciences	Lonnie L. Anthony, 3-3146
Operations Analysis and Planning	Fay B. Duncan, 3-3186
Shift Operations	Mae Ely, 3-3282
Maintenance	Jim E. Heiskell, 3-3137
Separations Systems	Donald E. Tidwell, 3-3777
Operating Contractors Project Office	Willis E. Muldrew, 3-9437
Engineering	George F. Pilgram, 3-3184
Central Employment	Louise Bentley, 3-4595
Finance, Materials and Services	Harold E. Alexander, 3-9638
Operations	J. Doug Lovette, 3-3001
Technical Services and NURE	Gerald V. Pierce, 3-9622
Security and Plant Protection	Mary Hughes, 3-3044
Enrichment Technology	Marion Randolph, 3-3577
Purchasing and Auditing	Opal Waller, 3-4264
General Accounting	Ron S. Barry, 3-9821
Environmental Management and Added Enrichment Review Team	Joe M. Wolfe, 3-3688
Barrier Manufacturing	Gary M. Denton, 3-3874
Capacity Expansion	W. Eugene Rooks, 3-3320
Employee Relations	Mary M. King, 3-3311

Union Carbide-DOE ink contract

Union Carbide Corporation and Commission and the Army's DOE have renewed their contract for operating the four facilities in Tennessee and Kentucky. Robert J. Hart, manager of DOE's Oak Ridge Operations signed for the Federal Government and Alec Flamm, executive vice president of UCC, signed the document, which extends the operating contract through September 30, 1983.

Union Carbide began operating the gaseous diffusion plants from their beginnings, Oak Ridge in 1943, Paducah in 1952, and assumed responsibilities for the Y-12 Plant and Oak Ridge National Laboratory in 1947.

The facilities represent a federal investment of some \$3 billion at acquisition date. The four plants are engaged in supporting national defense and energy research, development and demonstration.

All plants surpass goals; More pledges to come

With a few cards still outstanding in Nuclear Division plants, it's over the top for the United Way goal! A total of \$808,731 has been pledged thus far—107 percent over the goal of \$755,000. ORGBP exceeded its goal by 111 percent and Paducah followed as a close second with 110 percent.

Official standings for each plant were:

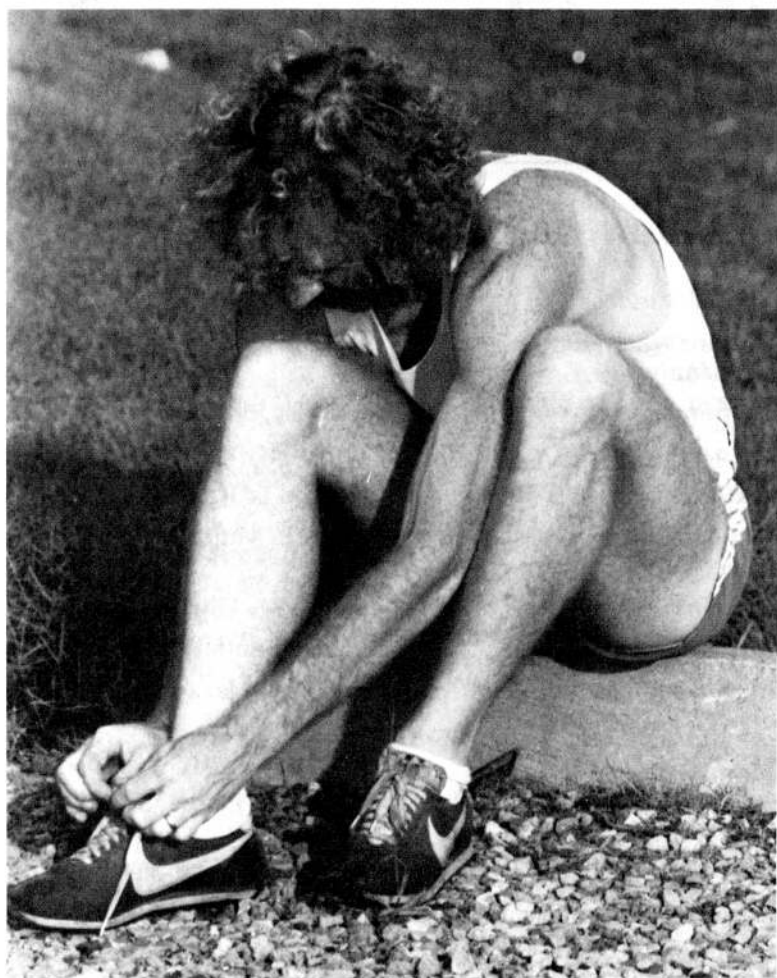
Plant	Goal	Pledged	% of goal
ORGBP	\$216,752	\$246,912	111%
Paducah	85,000	93,000	110%
Y-12 Plant	179,220	194,743	104%
ORNL	274,028	274,076	100%

ORGBP set a strong lead the first week of the campaign and has maintained it with a pledge card return rate of more than 98 percent.

The \$808,731 pledged does not include the corporate gift of \$17,500 made to Anderson County last week.



ANDERSON COUNTY UNITED WAY—Roger F. Hibbs, president of the Nuclear Division, presents a check for \$17,500 to the United Way of Anderson County, as a corporate contribution to community agencies in the county. From left are Hayden Evans, vice president of the local United Way; Mellie Koons, executive secretary; Hibbs; J. Edwin Birdwell, UW local president; and William McWhorter, co-chairman of the three Oak Ridge plants.



A different drummer . . .

Mike Rowland: Paducah 'marathon man'

"Roadrunner /n: a largely terrestrial bird of the cuckoo family that is a speedy runner and ranges from California to Mexico and eastward to Texas."

According to eye witnesses at the Paducah Plant, a roadrunner has been identified in the Western Kentucky area running distances of up to 26 miles. Although some sedentary spectators believe this specimen to be a member of the cuckoo family, further investigation and observance have determined that the runner in question is a member of the Amateur Athletic Union and is confined to the southeastern region of North America.

Experts have discovered that this mysterious sneaker-clad runner is Mike Rowland, electrical trainee in Paducah's Fabrication and Maintenance Division. Rowland began the sport in April, 1977, and has logged almost 4,000 miles since then.

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"I initially began running two to three miles a day simply to try and improve my physical fitness," he said. "I began my program because I was becoming easily tired doing things I used to do with hardly any effort."

Now 4,000 miles and 15 pounds later, Rowland has become a bonafide marathon runner. "Like most people, I need to have a long-range goal to work toward," he explained. "At the time I began running, the Boston Marathon was coming up, so I chose that race as my goal."

Rowland did not run in Boston, but he has achieved considerable success in several regional events. He took first place in the 23-28 age group at Owensboro, Ky., in the 10-mile Hydro Fair Race. He finished the contest in a winning 56 minutes.

'Rowland ran the 13-mile race in an hour and 14 minutes.'

He was the 31st runner over the line with a field of 2,100 during the Kentucky Derby Festival Mini-Marathon in Louisville. Rowland ran the 13-mile race in an hour and 14 minutes.

Rowland also participated in the 1977 Murray State University Invitational Road Relay running on the second place team. Most road races range from 3 to 26.2 miles the official marathon distance, and are run during the early morning. Aid stations along the route usually are provided by the sponsor.

"I usually begin training about three months before a race," Rowland said. "I alternate short and long distances as well as fast and slow speed." Short days generally mean a 6- to 7-mile run and 12 to 13 miles on long days. "I try to make at least one 20-mile run during the week," he said.

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Rowland concedes to being a little bored and tired early in his running routine; however, as he lengthened his distances, he began to realize that "instead of boring, running could be a very exhilarating and yet relaxing experience. I no longer needed a long range goal—I simply started to enjoy running," he said.

In addition to enjoyment and weight loss, Rowland says he is experiencing "better all-around health. I feel my heart is stronger since my pulse rate has dropped to

about 48 to 50," he said. The average human heart rate is around 72 and, according to the plant's medical staff, Rowland's cardiac output is more efficient as a result of long distance running.

Concern for his marathon condition has also improved his eating habits. "I've become more conscious of what I eat," he said. "Many people thrive on protein during the week before the race and eat a lot of carbohydrates," he explained. "I usually ask my wife to make spaghetti a couple of times. I like it and it's a good carbohydrate source."

'More people are taking to the roads in pursuit of fitness, relaxation and competition.'

"More and more people in our area are taking to the roads in pursuit of fitness, relaxation and competition," Rowland believes. Because of this increased interest, a Paducah Road Runners Club has been formed. "The main objectives of the club are to promote long distance running and to sponsor competitive races as well as non-competitive fun runs," he added.

"Whether you run one mile a day or 100 miles a week, you're invited to call any of us for information about the club. It's fun to share your ideas on running and to meet people on our occasional runs," he said.

There are several PGDP employees in the club and anyone interested in joining may contact Rowland or any club member.

Next issue. . .

The next issue will be dated October 26. The deadline is October 18.

NUCLEAR DIVISION NEWS

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Wartime women anecdotes needed

Women working in a man's world is not a trend to be associated strictly with women's lib, especially in the Nuclear Division.

Since the Oak Ridge facilities were constructed during World War II, women have been instrumental in keeping them going. The **Nuclear Division News** would like to find out what these "wartime women" contributed.

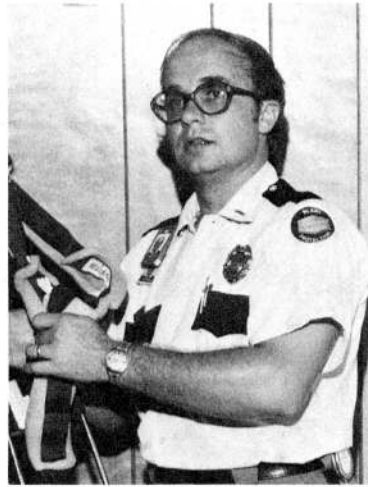
We need your responses. If you worked during the war years, or know someone that did, please contact Deb Webster, 3-6415, Room K-253, Building 4500N, ORNL.

about people...

Lt. J. A. "Tony" Cox, ORGDP Fire and Guard Department, who has been an Emergency Medical Technician (EMT) for nine years, has been certified by the Tennessee Department of Health as an EMT instructor.

To gain certification, Cox completed extensive written and practical EMT exams given by the state. He will be training fire drivers and officers at ORGDP and Y-12 to become EMT's, which requires about 110 hours of classroom instruction and about 10 hours of work in an area hospital emergency room.

Cox has been employed at ORGDP for five years. Previously, he served as assistant director of ambulance service for Anderson County.



Cox

Ed D. Hudson, Richard S. Lord and Gregory S. McNeilly have been elected senior members of the Institute of Electrical and Electronics Engineers.

Senior member is the highest professional grade for which application may be made and requires experience reflecting professional maturity.

Hudson was selected for the honor after his work on cyclotrons, cyclotron magnets and ion sources. An engineer in ORNL's Physics Division, he began work at Tennessee Eastman's Y-12 Plant in 1943.

Lord, a research staff member in the Physics Division, also began work in 1943 at Eastman's Y-12 Plant.

A section head in the Computer Sciences Division, McNeilly joined the Nuclear Division in 1969 after completing his education in nuclear physics.

John Shacter, Operations Analysis and Planning Division at ORGDP, was appointed by the National Academy of Sciences to serve as one of five members of its "management and technology" committee. The committee serves as the Academy's liaison and advisory group to the management and technology area of the International Institute for Applied Systems Analysis (IIASA) near Vienna, Austria.

The IIASA is composed of more than 100 experts from 17 countries, engaged in research on energy, food and agriculture, climate effects and other biological and environmental developments.



Pictured receiving their certificates are, from left, Parsons; Cindy Gregory, a CPT sales support representative; and Brown. Westmoreland was not available for the picture.

Three members of ORGDP's Systems and Procedures Department, General Accounting Division, have been certified as word processors by the CPT Corporation: **Sharon Parsons, Debbie Brown and Jo Westmoreland**. They were the first to be certified by CPT in the Oak Ridge/Knoxville area and were among the first certified in the Southeastern United States. The CPT word processing equipment was installed at ORGDP last April.

division death...



Mr. Waddell

Bruce V. Waddell, a research staff member in ORNL's Fusion Energy Division, died September 14 at Ft. Sanders Presbyterian Hospital, Knoxville.

Mr. Waddell had been employed at ORNL since June 1976 and was a Eugene Wigner Fellow.

Survivors include his wife, Carol, and son, Brian, who live at 19 Newcastle Lane, Oak Ridge; and his parents, Elmer and Emily Waddell of St. Charles, Tenn.

Services were held at the Martin Funeral Home, Oak Ridge, with burial in Lawrenceburg, Ky.

Memorial gifts may be made to the Oak Ridge Endowment Fund, Oak Ridge Public Library.

Wigner Fellows named

ORNL has announced two appointments under its Eugene P. Wigner Fellowship Program. The new fellows are: **Steven P. Hirshman**, a former summer employee who will work in the plasma theory section of the Fusion Energy Division; and **Glenn R. Young**, who has been assigned to the cyclotron group of the Physics Division.

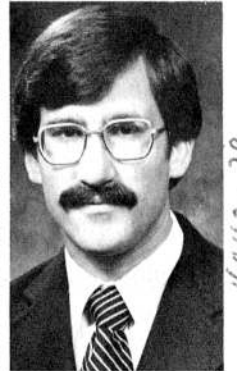
Established in 1976, the Wigner Fellowships honor the Nobel laureate who was the Laboratory's first director of research and development in 1946-47 and now serves as an ORNL consultant. The fellows are selected from candidates no more than three years past the doctorate level.

The two-year appointments provide opportunities for engineers and physical, life and social scientists to gain experience in research areas related to national energy programs and needs. The new fellows bring the total appointments to 13, with 10 currently on assignment at the Laboratory.

Hirshman majored in electrical engineering at the Massachusetts Institute of Technology (MIT), where he was a National Science Foundation Graduate Fellow from 1972 to 1975. He received his BS and MS degrees from MIT in 1973 and his Doctorate of Science degree in 1976. After graduation, he worked as a research associate in MIT's Department of Nuclear Engineering. Before coming to Oak Ridge, he worked two years as a postdoctoral research associate at Princeton University's Plasma Physics Laboratory. His summer experience includes working as a research associate in ORNL's Fusion Energy Division in 1974, and as a research



Hirshman



Young

assistant at the AVCO Everett Research Laboratory, Mass.

Hirshman and his wife, Alessandra, live at 118 Clark Lane, Oak Ridge. They have three children: Peter, Angela and Veronica.

A native of Kingsport, Young attended the University of Tennessee, where he graduated summa cum laude in 1973 with a BA degree in mathematics and physics. In 1977, he received his PhD in physics from MIT. At MIT, Young was one of five Chaim Weizmann Postdoctoral Fellows working in the Laboratory for Nuclear Physics. He also worked two summers as a research assistant in the Tennessee Eastman Company Research Laboratory, Kingsport, and at the Eastman Kodak Research Laboratory, Rochester.

Young lives in Oak Ridge at 223 Villanova Road.

McCauley named to OCPO post

Lowell L. McCauley has been named manager of administration for the Operating Contractors Project Office, which is playing a major role in construction of the nation's first gas centrifuge enrichment plant at Portsmouth, Ohio.

A native of Lansing, Mich., McCauley received a BS degree in chemistry from Northwestern University. He joined the Technical Division at ORGDP in 1951, and in 1964 joined the Separations Systems Division with assignments in both gas and liquid centrifuge development programs. McCauley was associated with the Atomic Energy Commission Combined Operations Planning for seven years before being named director of the Nuclear Division's Industrial Participation Program in 1973. In 1976 he was named manager of administration for the Office of Waste Isolation, a post held until his new assignment.



McCauley and his wife, the former Nancy Warter of Trenton, N.J., live at 107 Baker Lane in Oak Ridge. They have three children; Lowell Jr., Meridith and Cynthia who works in the Separations Systems Division.

patents granted

To **Robert L. Brown**, ORNL, for "Dual-Function Magnetic Structure for Toroidal Plasma Devices."

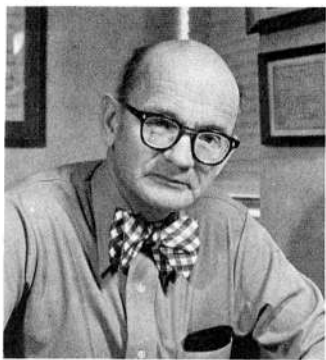
To **Ronnie A. Bradley, William R. Hamel, William H. Miller Jr. and John D. Sease**, all of ORNL, for "Automatic Inspection System for Nuclear Fuel Pellets or Rods."

To **Chester S. Morgan**, ORNL, for "Preparation of Cermets."

To **Steven A. Wallace**, Y-12 Plant, for "Radiation Attenuation Gauge with Magnetically Coupled Source."

Daylight Savings ends

That hour of sleep we lost last spring will be regained Sunday, October 29, at 2 a.m. when the clocks are rolled back to Standard Time. Employees at Oak Ridge and Paducah will clock in on Savings Time and out on normal time.



The need for blood

by T. A. Lincoln, M.D.

(Editor's Note: Dr. Lincoln alternates his regular column with "The Medicine Chest," where he answers questions from employees concerning health in general. Questions are handled in strict confidence, as they are handled in our Question Box. Just address your question to "Medicine Chest," NUCLEAR DIVISION NEWS, Building 9704-2, Stop 21, Y-12, or call the news editor in your plant, and give him or her your question on the telephone.)

Techniques developed in recent years have enabled physicians to use blood more efficiently. Nevertheless, the need continues to almost outstrip the available supply. It has been estimated that one unit of blood per year will be needed for every 20 residents in a region which is self-sufficient in its own medical facilities and professionals.

Largest in free world

The Greater New York Blood Program, which is the largest in the free world, serves 18 million people and 280 hospitals. It requires the collection, processing, storage and distribution of over 700,000 units of blood and a proportionately large number of blood components each year.

Whole blood consists of plasma, which is the fluid (noncellular) portion of the circulating blood, and is distinguished from serum, which is the fluid portion obtained only after the cellular components have been allowed to clot. The cellular components are the red blood cells, white blood cells and platelets. Although a gross oversimplification: the red cells carry the oxygen, the white cells fight infection and maintain immunity, while the platelets are essential to prevent bleeding and to allow the formation of blood clots. These components can now be separated selectively from whole blood by centrifugation.

Multiple bags are used

In New York, blood is collected in multiple plastic bags rather than in a single bag. The whole blood is drawn from the donor into the first bag and then, by using special centrifuges, the original blood can be separated, if desired, into the components and moved into the other bags. By such a technique, there is no danger of bacterial contamination since the bags are sterile and connected by sterile plastic tubing. The end result can be five separate bags, each containing a specific component. Bag one contains the red blood cells; bag two, the white blood cells; bag three, the platelets; bag four, fresh plasma which can be immediately frozen to make a special component called cryoprecipitate; and bag five, which contains what is left—the residual plasma.

Because of the chemical and radiation treatment of many cancers and leukemias and the increasing use of organ transplantation, blood components are now widely used. If the treatment causes a severe depression of only one or two of the cellular components, there is no need to transfuse whole blood. The specific cells needed can be transfused, and

the remaining cells saved and used in someone else who needs a different component.

Plasma separated, kept

Whole blood has to be used within 21 days. Because hospitals have to keep a large reserve supply of all types for use in treatment of emergencies such as auto accidents, major surgery or internal hemorrhages, a great deal of blood becomes outdated. Fortunately, it does not need to be thrown away. The plasma is separated and kept. It is fractionated into what are known as blood derivatives. They include, for example: serum albumin, used extensively by surgeons in place of whole blood; gamma globulin, used to prevent hepatitis; and anti-hemophilic concentrates, used to treat patients with hemophilia, a genetic bleeding disease. In New York, over 60,000 liters of plasma are processed each year.

Need more donors

In spite of the high usage of blood and blood components, if all persons who were medically eligible would donate, they would only have to give about once every seven years. In fact, less than 10 percent of eligible donors donate at least once a year. Although the medical requirements for eligibility are more strict now than five years ago, it is believed that about 70-80 percent of the adult population between 17 and 65 are eligible. Donor selection criteria have been determined and published which make it relatively easy for a physician to advise possible candidates as to their eligibility.

What is needed is to get more people to donate one unit every few years rather than depend on a few loyal volunteers to donate more frequently. The need is great, and who can say with confidence that no members of their family will ever need blood? There is a high likelihood that some day their need will be critical. Will the supply be available?



Dennis Bradburn examines a year-old pine tree planted in sewage sludge.



Control

More An ex

By Ed Williams

Dennis Bradburn's job is to "farm" the Oak Ridge reservation—he grows trees. However, this is not the only responsibility of the forest management group which Bradburn heads as part of ORNL's Environmental Sciences Division.

"One of our primary duties is to produce healthy trees and insure vigorous growth of the forest, but the group also is responsible for maintaining suitable areas for ecological research and conserving those parts of the reservation which contain unique natural or historical resources," Bradburn said.

The war caused a rush in harvesting timber to build homes and businesses as the Oak Ridge population grew.

The history of the land has made the job of growing healthy trees difficult.

When the U.S. Government took control of this rural area in the summer of 1942, almost 1,000 landowners (3,000 people) made their livelihood from the soil. Decades of plowing and planting had taken a toll. The land was almost farmed out.

The nation's wartime rush into the "atomic age" brought 90,000 people into a once sparsely populated area of 59,000 acres. The immediate demand for building materials led to harvesting of the area's timber.

Then, except for timber cut to construct the city of Oak Ridge and additions to the three energy-related facilities that resulted from the Manhattan Project, the forest was left unattended and virtually undisturbed until 1947 when a reforestation program was initiated.

'Pines don't grow equally well everywhere, but when they're all you have, they are better than no trees at all.'

By 1960, nine million pine seedlings had been planted on approximately 4,300 acres of the reservation. "Pines don't grow equally well everywhere, but when they're all you have, they



A member of the Young Adult Conservation Corps plants a seedling in a sludge-fertilized area.

Safety concern halts woodcutting

The local DOE office has decided to discontinue the practice of public woodcutting on DOE-controlled property in Oak Ridge. The decision is based primarily on the concern for safety of individuals engaged in woodcutting with its inherent and well-recognized hazards. While many woodcutters are experienced and highly proficient with hand and power tools used for cutting wood, others are not, subjecting themselves to potential, serious injury.

DOE cannot assume the responsibility for selecting only certain individuals to participate in the woodcuttings based on a judgment as to their experience or proficiency, and therefore potential for their sustaining injury. While a waiver with respect to liability could be required from all woodcutters, as has been done in the past, this presents serious problems of policing the activity and does not absolutely protect against legal action in the event of injury.

5029-78



Controlled burning clears litter, diseased trees, and returns soil nutrients.

More than just planting trees; experiment in cultivation

are better than no trees at all," Bradburn said.

When the current program was established in 1964, nearly a fourth of the reservation's trees were pine. During the past 14 years more than 1,800 acres have been planted in black walnut, butternut, eastern cottonwood, yellow poplar, sycamore, black cherry, ash and various pine species.

"Our job is to care for and cultivate the forest using the best management practices and techniques available," Bradburn said. "In order to rebuild the forest, it may be necessary at times to remove the part which has been infested by insects or disease. People see a bulldozer plowing through an area and often don't realize that we are not indiscriminately destroying trees. We're trying to restore the forest."

Much of the forest management work is devoted to analyzing soils and sites to determine precisely where a particular tree will grow best. This is the first step toward a healthy forest. Silviculture—growing, tending and caring for trees—has begun.

In order to rebuild the forest, it may be necessary to remove part of it.

After the proper species is selected for a particular site, it is important to place the right number of trees on any given acre. On the average, this means about 690 pine trees or 435 hardwood trees per acre. The trees are overplanted initially to fully utilize total land area as quickly as possible.

By the time the stand is ready to be thinned to avoid growth stagnation, the trees have reached a merchantable size. Local logging firms buy the timber, cut it and remove it from the reservation. It is later manufactured into furniture, paper, building material and other wood products. Money from these sales is turned over to the U.S. Treasury in accordance with legislation governing sales of natural resources from government-owned land.

Protecting the forest is a very important aspect of the program. All

dead matter and thick undergrowth which might harbor insects and contribute to wildfires must be removed. In pine stands, this is usually done through controlled burning activities conducted in the spring or fall of the year. Other techniques must be used to clear hardwood stands since most hardwoods are damaged or killed by fire.

Pine overcrowding is regulated through controlled burning.

Forests that have been weakened due to overcrowding are very susceptible to pests like the Southern Pine Beetle. With a gestation period of only 28 days, the beetles come in, lay eggs, multiply and begin feeding on the forest. Hundreds of acres can be ruined in short order.

When this type of infestation occurs, Bradburn's team has little resource but to salvage as much standing timber as possible, sell the merchantable wood and attempt to eliminate the insect. Timber which cannot be saved or sold is stacked and set afire. One benefit of the "pile and burn" method is as an effective means of destroying harmful insects. A second benefit of this process is that it returns nutrients to the soil.

'Pile and burn' destroys insects and enriches the soil.

A small experiment is currently underway in which sewage sludge from the city of Oak Ridge is used to enrich soil that will later be planted with trees of various species.

Other forest management staff are Eveart Rosenbalm, Howard Raby and Arnold Hunley. Additional support is provided by Plant and Equipment Division personnel and summer forestry students.

So the next time you see a bulldozer pushing through the woods or a curl of smoke rising above the trees, try not to be too critical. It probably means that an old forest is being revitalized or that a new forest is under construction.



Eveart Rosenbalm, Environmental Sciences, inventories trees.

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Bradburn among pines planted in 1973.

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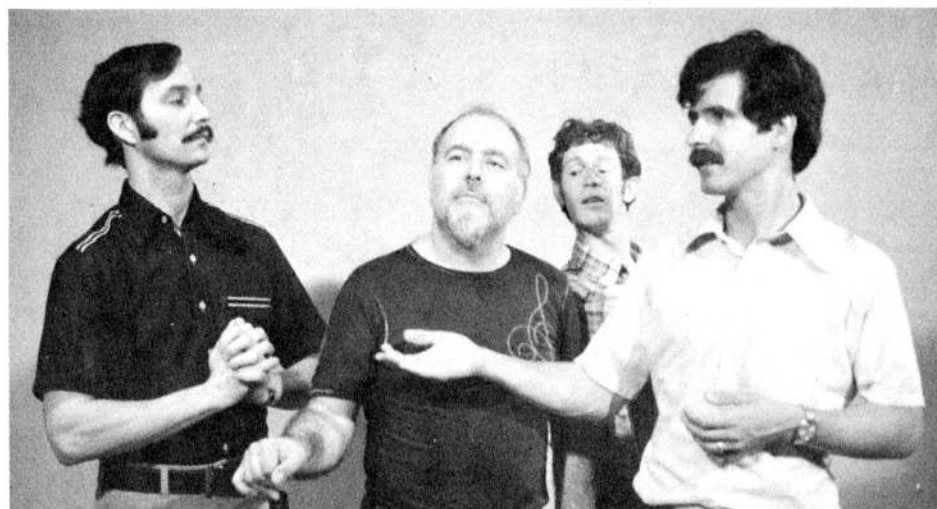


Bulldozing precedes replanting.

recreationotes . . . 78-4120



BARBECUE-HOOTENANY—An ORGDP tradition was another success as the crowd enjoyed delicious barbecue and fun at the Clark Center Recreation Park September 23. A variety of activities, including clogging, softball, belly-dancing, pie-throwing, etc., as well as games for the children, kept everyone busy, but not too active to enjoy the fine food.



'THE AMOROUS FLEA'—Arvid Paston, Gordon Warner, Alan Spiewak and Tony Wright, from left, will appear in the Oak Ridge Playhouse production of "The Amorous Flea." This musical romp will be performed October 20, 21, 27, 28 and November 3 and 4 at 8:20 p.m. at the Oak Ridge Playhouse.



GOLF LEAGUE CHAMPS—The top team in the 1978 Paducah Plant Golf League amassed 219 points to become the championship swingers. From left in the front row are Tony Morphew, Archie Miller Jr., Robert Peeler and Doug Williams. In the back row are J. B. Howard, Carl Walter, John Owens and Bill Griggs. Team member Arv Gorline is not pictured.

wanted . . . ORGDP

VAN POOL RIDERS WANTED from Karns, to K-25, 7:45-4:15 or 8:00-4:00. Tom Lemons, plant phone 3-9870, home phone 947-8959.

RIDE from Bearden area of West Knoxville, to Portal 2, 6:30-4:30. Sarah "Neal" Horne, plant phone 3-3800, home phone 884-0889.

JOIN CAR POOL or **RIDE** from Eblen Estates in Kingston, to Portal 4, 8-4:30. Glenn Shannon, plant phone 3-3511, home phone 376-6455.

RIDE or **JOIN CAR POOL** from Rockwood, Portal 2, 3, or 4, 7:45-4:15. Susan Lake. Plant phone 3-9420 or 3-9377, home phone 354-2418.

Y-12 PLANT

VAN POOL or **CAR POOL** from Cumberland Estates, Oak Ridge Highway, Knoxville, to West Portal, straight day. Betty Queen, plant extension 3-7182, home 584-4213.

JOIN CAR POOL from Waddell Circle, off West Outer Drive, Oak Ridge, to North Portal, straight day. David Robinson, plant phone 3-7301.

RIDE from West Vanderbilt, Oak Ridge, to East Portal, straight day. Marshal Vitullo, plant phone 3-2271.

CAR POOL MEMBER from Inskip Road-Dutch Valley Road area, Knoxville, to North or Biology Portal, 8-4:30. Susan Bell, plant phone 3-7845, home phone 688-6857.

RIDE from Norwood, Clinton Plaza area, Knoxville, to East Portal, 8-4:30.

Kathi Vaughan, plant phone 3-5722, home phone Knoxville 689-3274.

RIDE from Cumberland Estates, Oak Ridge Highway area to West Portal, 8-4:30. Betty Queen, plant phone 3-7182, home phone 584-4213.

RIDE or **JOIN CAR POOL** from Karns area to East or North Portal, 8-4:30. Charlie Watson, plant phone 3-7744, home phone 690-2727.

ORNL

ONE or **TWO CAR POOL MEMBERS** from Powell vicinity of Irwin Road and Beaver Creek Drive to East Portal, 8-4:30. Eugene Lamb, plant phone 3-6483, home phone 947-6037.

CAR POOL MEMBERS from Lovell Heights area, Concord, to North or West Portal, 8-4:30. Jerry Dixon, plant phone 3-1108, home phone 966-1232.

RIDE or **RIDER** from Windsor Court Apartments, Fountain City area to East Portal, 8-4:30. Brenda Hatchett, plant phone 3-6766, home phone 687-9413.

JOIN CAR POOL from East Village area, Oak Ridge, to West Portal, 8-4:30. Gary Puckett, plant phones 3-1516 or 3-0221, home phone 483-7116.

JOIN CAR POOL from Walker Springs, West Knoxville area, to any portal, 8-4:30. Susan Rowland, plant phone 3-1872, home phone 690-3204.

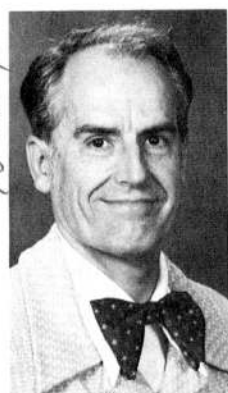
CAR POOL MEMBER from Landmark subdivision, Gulf Park area, Knoxville, 8:15-4:45. N. Hennon, plant phone 3-1421, home phone 690-2088.



25 YEARS OF UNITY—Current members of the Paducah Plant's Union-Management Safety Committee along with many previous members celebrated the group's 25 years of cooperation recently. From left are Adrian K. Freels, Fabrication and Maintenance Division; George T. Hull, Cascade Operations superintendent; Robroy Millican, Fabrication and Maintenance superintendent; William G. Beasley, Fabrication and Maintenance Division; Hugh G. Coltharp, Safety Department; and James E. Kelly, Cascade Operations Division.

anniversaries ...

35 YEARS



Andress



Hunnicutt



Lord



Mann



Holt



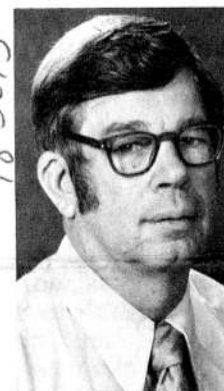
Stephens



Rollins



McLendon



West



Wilson

Thomas M. Andress, Y-12 Electrical Engineering, joined the Manhattan Project November 1, 1943. He lives at 106 Venus Road, Oak Ridge.

Edwin M. Hunnicutt, Y-12's General Expediting, hired in October 21, 1943. He lives at 321 Pennsylvania Avenue, Oak Ridge.

Richard S. Lord, a research staff member in the Physics Division at ORNL, joined Tennessee Eastman's Y-12 Plant on November 11, 1943. Lord lives at 306 East Forest Road, Oak Ridge.

J. Ed Mann, senior research staff member in the ORNL Physics Division, joined Tennessee Eastman at the Y-12 Plant on November 17, 1943. He initially worked in production at Y-12 but later joined the Electronuclear Division (now Physics) at ORNL. Mann lives at 101 Timothy Lane, Clinton.

Roy C. Holt, a veteran pipe fitter with the Plant and Equipment Division, ORNL, began his company service on November 17, 1943. He lives at 411 Woodland Drive, Clinton.

Jay O. Stephens, Y-12 Special Services, lives at 111 Albright Road, Oak Ridge. He came to Y-12 October 20, 1943.

Mona B. Rollins, Y-12 Plant Laboratory, lives at 923 Medaris Street, Clinton. She came to Y-12 November 8, 1943.

Jack D. McLendon, superintendent of Radiation Safety, began his company service on November 5, 1943. He lives at 104 Baylor Drive, Oak Ridge.

C. M. "Hap" West, Radiation Safety, joined the Manhattan Project November 1, 1943. He lives at 910 Riverbend Road, Clinton.

Ralph L. Wilson Jr., Salary Administration, joined Union Carbide on October 11, 1943. He lives at 110 Temple Road, Oak Ridge.

Y-12 PLANT

25 YEARS

Thomas W. Compton Jr., James R. Murph, William T. Headrick, Marvin Q. Kosier, Howard L. Vandergriff Sr., Herbert Reynolds, John H. Hansard, Lawrence R. Loveless, Everett S. Smith, James B. Bowman, John R. Bosson, Norman D. Kennedy, Robert M. Kemper Jr. and Roland E. Plemons.

20 YEARS

Alfred C. Gose, Ollie A. Ellis, Frank O. Bowman, William R. Tipton and John D. Goad.

PADUCAH

25 YEARS

James L. Freeman, Charles A. Lamb, Jerry A. Howell, Don F. Spencer, Charles H. Brown, M. Charlene Dawes, Eugene Stallons and Elbert M. Steinbeck.

ORGDP

30 YEARS

D. Steve Napolitan, Technical Services Division.

25 YEARS

James R. Browning, Louis T. Birdwell, Martin L. Taylor, Jacob F. Simmons Jr., Beulah M. Williams.

Paducah promotions listed

Four promotions have been announced at the Paducah Plant. Charles L. Ashburn has been made a supervisor in Power, Utilities and Chemicals; Charles R. Conner a nuclear safety engineer in Technical Services; Jack L. Hulett a general supervisor in Fabrication and Maintenance; and Shirley A. Rudolph a supervisor in Cascade Operations.

Ashburn joined Union Carbide in 1952, and has worked in Cascade Operations and the Maintenance Division. He was formerly a machine operator at Caterpillar Tractor Company. He and his wife, Alice, live on Nolan Drive, Paducah. They have three children, Nancy, David and Mark.

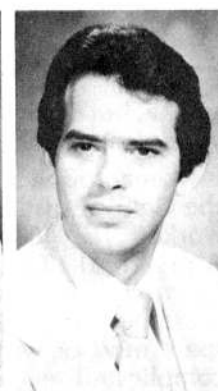
Conner received his BS degree in physics and mathematics at Memphis State University prior to joining Union Carbide early this year. He is a native of Elk City, Okla., and is attending Southern Illinois University. He and his wife, Gail, live on Clay Street, Paducah.

Hulett is a 26-year veteran and has worked as a process maintenance supervisor, a machining supervisor and "B" shift maintenance coordinator. He was with the Illinois Central Gulf Railroad shop before joining Union Carbide. He attended Paducah Community College. A native of Clinton, Ill., Hulett lives on Springdale in Paducah with his wife, Charlene. They have three daughters, Nancy, Sarah and Jacqueline.

Rudolph received her BS degree in business from Murray State University in 1973. A native of East Prairie, Mo., she worked with Fisher-Price Toys before joining Union Carbide in 1976. She and her husband, Danny, live on Route 1, LaCenter, Ky.



Ashburn



Conner



Hulett



Rudolph

anniversaries...

ORNL

30 YEARS

Myron F. Fair, Industrial Safety and Applied Health Physics; Robert B. Splittgerber, Instrumentation and Controls; and Charles A. Wallace, Engineering Technology.

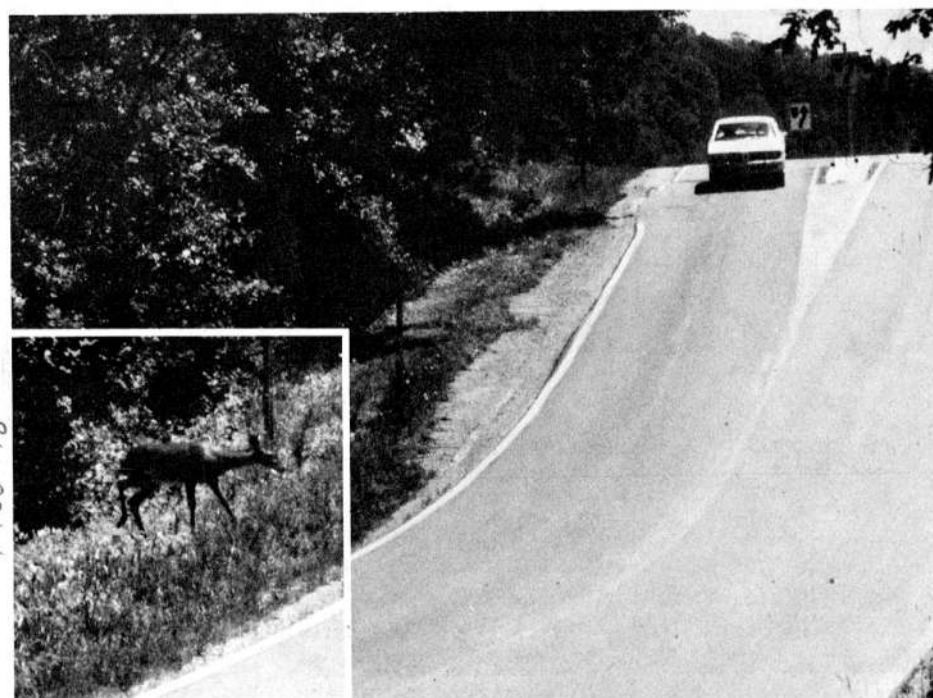
25 YEARS

Gerald F. Johnson, Clyde E. Greenway, Cleave C. Brooks, Inez W. Hodge, Hurchel W. York, Donald D. Pair and Roy L. McKinney.

safety scoreboard

Time worked without a lost-time accident through October 5:

Paducah	55 Days	715,000 Employee-Hours
ORGDP	182 Days	5,918,182 Employee-Hours
Y-12 Plant	176 Days	5,518,000 Employee-Hours
ORNL	8 Days	211,686 Employee-Hours



TIME OF YEAR—This is the season the deer are active; so please drive defensively.

Student research participant . . .

'I wasn't hired to do busywork'

Tatiana "Tanya" Mamantov doesn't smoke, but cigarettes have taken up a great deal of her time this summer.

Mamantov, a chemistry major at the Georgia Institute of Technology, worked for 10 weeks in ORNL's Analytical Chemistry Division isolating and studying harmful substances in cigarette smoke. She spent most of her time carrying out complicated extraction procedures and column separations to identify these mutagenic (mutation-inducing) compounds. Her summer assignment was part of a long-range program in the bio/organic analysis section to determine if there is a relationship between mutagenic substances in cigarette smoke and cancer.

Mamantov and 85 other undergraduate students were participants in Oak Ridge Associated Universities' student research participation program administered for DOE. The program, inaugurated in 1958, provides opportunities for selected college and university students—primarily juniors—to carry out independent research under the guidance of DOE staff scientists.

The research the students undertake is really that—they don't become laboratory glassware washers and equipment polishers. They work at real research, and they work hard.

Mamantov commented on this aspect of the program: "That's what

impressed me right away about the program. The people in my lab group made it plain right from the beginning that I wasn't there to do busywork, but to participate and to learn. It's been a great experience. The ORNL people were wonderful; the atmosphere relaxed, but I was expected to produce—and I could because I was part of a good group."

Mamantov plans on attending graduate school or possibly trying to enter medical school. Whatever her decision, it undoubtedly will be influenced by her summer in Oak Ridge. In the evaluation report that all the students turn in to ORAU's University Programs office at the end of their stay, she said:

"I feel that this is an extremely worthwhile program, and I hope many more students will have the opportunity to participate in it. Participants may find that research—particularly industrial research—is just what they are suited for. Or they may discover a specific interest in a chosen field. Then, again, students may realize that they're interested in a different career entirely.

"In any case, students will gain a valuable insight into the working world before leaving the academic world, and can direct their concentration accordingly."

Her father, Gleb Mamantov, is an adjunct research and development participant at ORNL.

ORAU 78-1799.2



CANCER RESEARCH—Tanya Mamantov adds solvent to a gravity-flow chromatography column, as part of her work isolating and identifying harmful compounds in cigarette smoke.

question box. . .

If you have questions on company policy, write the editor, **Nuclear Division News** (or telephone your question in, either to the editor, or to your plant contact). Space limitations may require some editing, but pertinent subject matter will not be omitted. Your name will not be used, and you will be given a personal answer if you so desire.

Excessive overtime?

QUESTION: When a division spends well over \$15,000 in overtime for a period of three to four months, would it not be feasible to hire additional employees on a permanent basis so long as their salary does not exceed the overtime pay?

ANSWER: Some proportion of the work time is expected to be overtime. Otherwise we would be overstaffed, inefficient and subject to frequent layoffs and rehires—a condition we strive to avoid. Your suggestion of simple economic balance is merely one of many considerations. Other considerations involve the longer range stability of work loan and budgets, alternatives of work and manpower assignments, sustainable work load vs. temporary peaks, etc.

Tardiness policies

QUESTION: Why can some secretaries who come in late—up to one and one-half hours—be permitted to stay later the same day to make up time? The tardiness is not shown on their time cards. However, other secretaries in the same department do not have this privilege. Shouldn't plant rules be applicable to all employees?

ANSWER: Plant rules for salaried nonexempt personnel's work schedules should be applicable to all employees. Employees are not permitted to determine their own work schedules. In some instances, personnel are assigned to special schedules, but informal schedules of the employee's choosing are not allowed. If you will give more specific information to your division director/superintendent or your installation Salary Administration Office, the matter you refer to will be fully investigated.

Lateral bidding

QUESTION: I am a level 5 secretary and in a very undesirable situation. I am told by Personnel that all level 5 secretarial jobs have to be bid, and

therefore, I am stuck. How does one go about transferring? Why can't we bid laterally? Secretaries have no opportunities for promotion, so it looks as if they could at least find a job in which they would be happy.

ANSWER: An employee is not permitted to bid on jobs in his/her own classification within the Job Opportunity System in order to avoid an excessive number of moves being involved in filling one vacancy. However, reassignments within the same classification can be made by management without there being a job bid. If you are dissatisfied with your present position, you should discuss the matter with your supervisor or with your Employee Relations Division to see if something can be done.

As to promotional opportunities for secretaries, many have gone into professional careers in various administrative support and supervisory jobs, and we encourage this group to continue to develop their skills to qualify for these opportunities.

Job bid notifications

QUESTION: Recently, I bid on a weekly payroll job in the Y-12 Plant. My letter of rejection from Personnel was addressed to me, but the envelope was addressed to my supervisor with a note on the outside "CONFIDENTIAL—To Be Opened by Addressee Only." Does this not leave the option open to the supervisor as to whether or not he/she will give the letter to the employee? Is this normal procedure for mailing rejections?

ANSWER: Since the supervisor, to make his/her plans, needs to know whether an employee has been awarded a job or not, it had been Y-12's practice to send a copy of the rejection letter to both in one envelope. As a result of your question, the practice will be changed and notices to the two will be mailed in separate envelopes.

	<p>UNION CARBIDE CORPORATION NUCLEAR DIVISION P.O. BOX Y, OAK RIDGE, TENNESSEE 37830 ADDRESS CORRECTION REQUESTED</p>	<p>BULK RATE U.S. Postage PAID Union Carbide Corporation</p>